

Regional HIV/AIDS Epidemiologic Profile of Northeast HSR, Massachusetts: 2014

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2014, this resulted in the removal of 4,135 HIV/AIDS cases, of which 973 have died and 3,162 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual reported risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual reported risk category was used with the intention of identifying HIV reported risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of men living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual reported risk category. The application of the presumed heterosexual reported risk category to men is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate reported risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual reported risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2013: Northeast HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	3,039	63%
People Reported with HIV or AIDS who are Deceased	1,787	37%
Total Number of People Reported with HIV Infection or AIDS	4,826	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 2. Average annual rate of HIV infection diagnosis from 2010 to 2012 and HIV/AIDS prevalence rate on 12/31/13¹: Northeast HSR, Massachusetts²

Average annual HIV diagnosis rate from 2010–2012	Average rate per 100,000	Average annual number of HIV diagnoses
Northeast HSR, MA	9.5	122.3
Massachusetts Total	10.5	688.3

HIV/AIDS prevalence rate on 12/31/13	Rate per 100,000	Number of people living with HIV/AIDS
Northeast HSR, MA	235.8	3,039
Massachusetts Total	292.7	19,165

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2003–2012, Northeast HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2003	2,137	54	165
2004	2,247	48	158
2005	2,355	46	154
2006	2,452	45	142
2007	2,518	52	118
2008	2,623	35	140
2009	2,699	35	111
2010	2,763	50	114
2011	2,836	42	115
2012	2,947	27	138

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 4. People diagnosed with HIV infection from 2010–2012¹ and people living with HIV/AIDS on December 31, 2013 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Northeast HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	252	69%	2,025	67%
Female	115	31%	1,014	33%
Place of Birth:	N	%	N	%
US	194	53%	1,718	57%
Puerto Rico/US Dependency ³	26	7%	368	12%
Non-US	147	40%	953	31%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	135	37%	1,311	43%
Black (non-Hispanic)	102	28%	743	24%
Hispanic/Latino	109	30%	858	28%
Asian/Pacific Islander	18	5%	103	3%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	132	36%	986	32%
Injection Drug Use (IDU)	28	8%	486	16%
MSM/IDU	-- ⁷	-- ⁷	86	3%
Heterosexual Sex	50	14%	476	16%
Other	-- ⁷	-- ⁷	70	2%
Total Undetermined	144	39%	935	31%
• Presumed Heterosexual Sex ⁴	41	11%	344	11%
• Undetermined ⁵	103	28%	591	19%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2013	
Under 13	0	0%	4	<1%
13 to 19	8	2%	21	1%
20 to 24	31	8%	46	2%
25 to 29	42	11%	101	3%
30 to 34	51	14%	147	5%
35 to 39	56	15%	231	8%
40 to 44	50	14%	335	11%
45 to 49	47	13%	578	19%
50 to 54	37	10%	639	21%
55 to 59	19	5%	480	16%
60+	26	7%	457	15%
Total⁶	367	100%	3,039	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 5. People living with HIV/AIDS on December 31, 2013 by gender and race/ethnicity: Northeast HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,062	52%	249	25%
Black (non-Hispanic)	345	17%	398	39%
Hispanic/Latino	537	27%	321	32%
Asian/Pacific Islander	68	3%	35	3%
Total²	2,025	100%	1,014	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 6. People living with HIV/AIDS on December 31, 2013 by gender and exposure mode: Northeast HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	986	49%	N/A	N/A
Injection drug use (IDU)	305	15%	181	18%
MSM/IDU	86	4%	N/A	N/A
Heterosexual sex	128	6%	348	34%
Other	35	2%	35	3%
Total Undetermined	485	24%	450	44%
• Presumed heterosexual sex ²	N/A	N/A	344	34%
• Undetermined ³	485	24%	106	10%
Total	2,025	100%	1,014	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Northeast HSR, Massachusetts¹, 2003–2012²

	Male		Female		Total
	N	%	N	%	
2003	110	67%	55	33%	165
2004	96	61%	62	39%	158
2005	94	61%	60	39%	154
2006	96	68%	46	32%	142
2007	73	62%	45	38%	118
2008	92	66%	48	34%	140
2009	76	68%	35	32%	111
2010	80	70%	34	30%	114
2011	81	70%	34	30%	115
2012	91	66%	47	34%	138

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Northeast HSR, Massachusetts¹, 2003–2012²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2003	60	36%	51	31%	49	30%	165
2004	56	35%	50	32%	43	27%	158
2005	54	35%	52	34%	44	29%	154
2006	60	42%	42	30%	38	27%	142
2007	44	37%	28	24%	42	36%	118
2008	40	29%	46	33%	40	29%	140
2009	36	32%	33	30%	35	32%	111
2010	44	39%	33	29%	28	25%	114
2011	37	32%	30	26%	41	36%	115
2012	54	39%	39	28%	40	29%	138

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Northeast HSR, Massachusetts¹, 2003–2012²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2003	75	45%	21	13%	69	42%	165
2004	79	50%	12	8%	67	42%	158
2005	71	46%	13	8%	70	45%	154
2006	85	60%	10	7%	47	33%	142
2007	61	52%	13	11%	44	37%	118
2008	65	46%	11	8%	64	46%	140
2009	59	53%	8	7%	44	40%	111
2010	61	54%	9	8%	44	39%	114
2011	61	53%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	115
2012	72	52%	13	9%	53	38%	138

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Northeast HSR, Massachusetts¹, 2003–2012²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2003	55	33%	27	16%	-- ⁵	-- ⁵	21	13%	-- ⁵	-- ⁵	21	13%	39	24%	165
2004	40	25%	19	12%	-- ⁵	-- ⁵	27	17%	-- ⁵	-- ⁵	23	15%	44	28%	158
2005	41	27%	13	8%	-- ⁵	-- ⁵	26	17%	-- ⁵	-- ⁵	26	17%	44	29%	154
2006	48	34%	14	10%	-- ⁵	-- ⁵	20	14%	-- ⁵	-- ⁵	21	15%	35	25%	142
2007	37	31%	17	14%	-- ⁵	-- ⁵	15	13%	-- ⁵	-- ⁵	16	14%	31	26%	118
2008	46	33%	6	4%	5	4%	18	13%	0	0%	22	16%	43	31%	140
2009	44	40%	5	5%	-- ⁵	-- ⁵	15	14%	-- ⁵	-- ⁵	14	13%	30	27%	111
2010	37	32%	9	8%	5	4%	19	17%	0	0%	13	11%	31	27%	114
2011	39	34%	9	8%	-- ⁵	-- ⁵	13	11%	-- ⁵	-- ⁵	12	10%	39	34%	115
2012	56	41%	10	7%	-- ⁵	-- ⁵	18	13%	-- ⁵	-- ⁵	16	12%	33	24%	138

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Northeast HSR, Massachusetts¹, 2003–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2003	49	165	30%
2004	77	158	49%
2005	58	154	38%
2006	52	142	37%
2007	41	118	35%
2008	38	140	27%
2009	34	111	31%
2010	46	114	40%
2011	50	115	43%
2012	42	138	30%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Northeast HSR, Massachusetts,¹ 2010–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	95	252	38%
Female	43	115	37%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	48	135	36%
Black (non-Hispanic)	40	102	39%
Hispanic/Latino	43	109	39%
Asian/Pacific Islander	7	18	39%
Place of Birth:	N	N	%
US	67	194	35%
Puerto Rico/US Dependencies ⁴	11	26	42%
Non-US	60	147	41%
Total³	138	367	38%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14